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Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: Thu Sep 06 16:08:42 EDT 2007

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Application No: 10560918 Version No: 2.0

Input Set:

Output Set:

Started: 2007-08-27 07:46:33.273
Finished: 2007-08-27 07:46:37.624
Elapsed: 0 hr(s) 0 min(s) 4 sec(s) 351 ms
Total Warnings: 87
Total Errors: 0
No. of SeqIDs Defined: 108
Actual SeqID Count: 108

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)
W 213	Artificial or Unknown found in <213> in SEQ ID (21)
W 213	Artificial or Unknown found in <213> in SEQ ID (22)

Input Set:

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Error code	Error Description
	This error has occurred more than 20 times, will not be displayed

SEQUENCE LISTING

<110> BAKER, Matthew
WATKINS, John

<120> MODIFIED HIRUDIN PROTEINS AND T-CELL
EPITOPES IN HIRUDIN

<130> MER-142

<140> 10560918
<141> 2005-12-16

<150> PCT/EP2004/006943
<151> 2004-06-25

<150> EP 03014332.5
<151> 2003-06-26

<160> 108

<170> FastSEQ for Windows Version 4.0

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1 5 10 15
Glu Gly Thr Pro Lys Pro Glu Ser His Asn Asp Gly Asp Phe Glu
20 25 30

<210> 2
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<212> PRT
<213> Artificial Sequence

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X=T, A, H, Q, T, L;
X=A, G, H, K, N, P, Q, R, V;
X=A, D, E, G, H, K, N, Q, R, S, T, I;

<221> VARIANT
<222> 30, 40, 47, 48
<223> X=A, D, E, G, H, K, N, P, Q, R, S, T, L;

X=A, T, V;

X=T, K;

X=A, T, P

<221> VARIANT

<222> 53, 56

<223> X=E, N, R, D;

X=H, F

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Glu Gly Ser Val Xaa Cys Gly Gln Gly Asn Lys Cys Xaa Xaa Gly Ser
20 25 30

Asp Gly Glu Lys Asn Gln Cys Xaa Thr Gly Glu Gly Thr Pro Xaa Xaa
35 40 45

Glu Ser His Asn Xaa Gly Asp Xaa Glu Glu Ile Pro Glu Glu Tyr Leu
50 55 60

Gln

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<210> 3

<211> 65

<212> PRT

<213> hirudo medicinalis

<400> 3

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1 5 10 15

Glu Gly Ser Val Val Cys Gly Gln Gly Asn Lys Cys Ile Leu Gly Ser
20 25 30

Asp Gly Glu Lys Asn Gln Cys Val Thr Gly Glu Gly Thr Pro Lys Pro
35 40 45

Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
50 55 60

Gln

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<213> Artificial Sequence

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<223> modified hirudin

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20 25 30

Asp Gly Glu Lys Asn Gln Cys Val Thr Gly Glu Gly Thr Pro Lys Pro
35 40 45

Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
50 55 60

Gln
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20 25 30
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35 40 45
Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
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Gln
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<211> 65
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<213> Artificial Sequence

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20 25 30
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35 40 45
Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
50 55 60
Gln
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20 25 30
Asp Gly Glu Lys Asn Gln Cys Thr Thr Gly Glu Gly Thr Pro Lys Pro
35 40 45
Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
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Gln
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20 25 30
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Glu Ser His Asn Glu Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
50 55 60
Gln
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<211> 65
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<220>
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20 25 30
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35 40 45
Glu Ser His Asn Asn Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
50 55 60
Gln
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<211> 65
<212> PRT
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<220>

<223> modified hirudin

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1 5 10 15
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20 25 30
Asp Gly Glu Lys Asn Gln Cys Ala Thr Gly Glu Gly Thr Pro Lys Pro
35 40 45
Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
50 55 60
Gln
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<211> 65

<212> PRT

<213> Artificial Sequence

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20 25 30
Asp Gly Glu Lys Asn Gln Cys Thr Thr Gly Glu Gly Thr Pro Lys Pro
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Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
50 55 60
Gln
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<211> 65

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<223> modified hirudin

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20 25 30
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35 40 45
Glu Ser His Asn Glu Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
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Gln
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<210> 13
<211> 65
<212> PRT
<213> Artificial Sequence

<220>
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<400> 13
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1 5 10 15
Glu Gly Ser Val Val Cys Gly Gln Gly Asn Lys Cys Arg Lys Gly Ser
20 25 30
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35 40 45
Glu Ser His Asn Asn Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
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Gln
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<220>
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20 25 30
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35 40 45
Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
50 55 60
Gln
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<210> 15
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<220>
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Glu Gly Ser Val Val Cys Gly Gln Gly Asn Lys Cys Ala Lys Gly Ser
20 25 30
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35 40 45
Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
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Gln
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<211> 65
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1 5 10 15
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20 25 30
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35 40 45
Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
50 55 60
Gln
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<210> 17
<211> 65
<212> PRT
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<220>
<223> modified hirudin

<400> 17
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Glu Gly Ser Val Val Cys Gly Gln Gly Asn Lys Cys Ala Arg Gly Ser
20 25 30
Asp Gly Glu Lys Asn Gln Cys Val Thr Gly Glu Gly Thr Pro Lys Pro
35 40 45
Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
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Gln
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<210> 18
<211> 65
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<220>
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20 25 30
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35 40 45
Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
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Gln
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20 25 30
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35 40 45
Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
50 55 60
Gln
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<220>
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Glu Gly Ser Val Val Cys Gly Gln Gly Asn Lys Cys Asp Gln Gly Ser
20 25 30
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35 40 45
Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
50 55 60
Gln
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<210> 21
<211> 65

Gln
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<210> 24
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<220>
<223> modified hirudin

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20 25 30
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35 40 45
Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
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Gln
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<211> 65
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<400> 25
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Glu Gly Ser Val Val Cys Gly Gln Gly Asn Lys Cys Glu Thr Gly Ser
20 25 30
Asp Gly Glu Lys Asn Gln Cys Val Thr Gly Glu Gly Thr Pro Lys Pro
35 40 45
Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
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Gln
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<211> 65
<212> PRT
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<220>
<223> modified hirudin

<400> 26
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1 5 10 15

Glu Gly Ser Val Val Cys Gly Gln Gly Asn Lys Cys Arg Lys Gly Ser
20 25 30
Asp Gly Glu Lys Asn Gln Cys Val Thr Gly Glu Gly Thr Pro Lys Pro
35 40 45
Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
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Gln
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<210> 27
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<212> PRT
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20 25 30
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35 40 45
Glu Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu Tyr Leu
50 55 60
Gln
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<210> 28
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<213>